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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,173	09/24/2003	Boris Ginzburg	P-6065-US	1568

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PEARL COHEN ZEDEK LATZER, LLP
1500 BROADWAY, 12TH FLOOR
NEW YORK, NY 10036

EXAMINER

HANNON, CHRISTIAN A

ART UNIT PAPER NUMBER

2618

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/668,173	Applicant(s) GINZBURG, BORIS	
	Examiner Christian A. Hannon	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is response to applicant's response filed on 07/19/2006. Claims 1-27 are now pending in the present application. **This action is made final.**

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Guo et al (US 2004/0170150), hereinafter Guo.

Regarding claim 1, Guo teaches a method comprising estimating a number of active stations in a communication network based on a number of stations from which transmissions are received during a pre-defined time period (Page 4, [0063], [0064]) and adapting a size of a contention window of a collision avoidance mechanism based on the estimated number of active stations of said communication network (Page 4, [0064]).

In regard to claim 2, Guo teaches the method of claim 1, comprising dynamically modifying the size of the contention window (Page 4, [0064]). The examiner is

interpreting Guo's adaptive contention window (CW) to be analogous to applicant's 'dynamic' CW.

Regarding claim 3, Guo teaches the method of claim 1, comprising modifying a parameter used in computing the size of said contention window (Page 4, [0062]). Guo teaches the dynamic change in CW is modifiable.

With regard to claim 4, Guo teaches the method of claim 3, comprising modifying a parameter indicating a minimum size of the contention window (Page 4, [0062]).

Regarding claim 5, Guo teaches the method of claim 3, comprising modifying a parameter indicating an initial maximum size of the contention window (Page 4, [0062]).

In regards to claim 6, Guo teaches the method of claim 3, comprising modifying a parameter indicating a non-initial maximum size of the contention window (Page 4, [0062]).

With respect to claim 7, Guo teaches the method of claim 3, comprising modifying the size of the contention window in relation to an estimated probability of collision (Page 4, [0063]).

Regarding claim 8, Guo teaches the method of claim 1, comprising sending a signal indicating a request for modification of the size of the contention window (Page 4, [0076],[0077]).

With regard to claim 9, Guo teaches the method of claim 1, comprising modifying a threshold value of a request to send mechanism (Page 5, [0078]). The examiner is interpreting Guo's "stop-for-a-round" to be analogous to the applicants "request-to-send."

In regards to claim 10, Guo teaches an apparatus comprising a processor to estimate a number of active stations in a communication network based on a number of station from which transmissions are received during a predefined time period and to adapt a size of a contention window of a collision avoidance mechanism based on an estimated number of active stations of a communication network (Figure 1, Item 102; Page 4, [0063], [0064]).

Regarding claim 11, Guo teaches the apparatus of claim 10, wherein the apparatus comprises a wireless modem (Figure 1, Item 112).

With regard to claim 12, Guo teaches the apparatus of claim 10, wherein the apparatus comprises a wireless access point (Page 3, [0031]).

Regarding claim 13, Guo teaches the apparatus of claim 10, wherein the processor is to modify a parameter used in computing the contention window (Page 4, [0062]).

In regards to claim 14, Guo teaches the apparatus of claim 13, wherein the parameter used in computing the contention window comprises a parameter indicating a minimum size of the contention window (Page 4, [0062]).

Regarding claim 15, Guo teaches the apparatus of claim 13, wherein the parameter used in computing the contention window comprises a parameter indicating an initial maximum size of the contention window (Page 4, [0062]).

With respect to claim 16, Guo teaches the apparatus of claim 13, wherein the parameter used in computing the contention window comprises a parameter indicating a non-initial maximum size of the contention window (Page 4, [0062]).

Regarding claim 17, Guo teaches the apparatus of claim 10, wherein the processor is to adapt the size of said contention window based on an estimated probability of collisions (Page 4, [0068]).

In regards to claim 18, Guo teaches the apparatus of claim 10, wherein the processor is to modify a threshold value of a request-to-send mechanism (Page 5, [0078]). The examiner is interpreting Guo's "stop-for-a-round" to be analogous to the applicants "request-to-send."

With respect to claim 19, Guo teaches a wireless communication device comprising a dipole antenna (Figure 2, Item 202), a processor to estimate a number of active stations in a communication network based on a number of station from which transmissions are received during a predefined time period and to adapt a size of a contention window of a collision avoidance mechanism based on an estimated number of active stations of a communication network (Figure 1, Item 102; Page 4, [0063], [0064]).

Regarding claim 20, Guo teaches the wireless communication device of claim 19, wherein the processor is dynamically modify a parameter used in computing the contention window (Page 4, [0062]).

In regards to claim 21, Guo teaches the wireless device of claim 19, wherein the processor is to dynamically modify a threshold value of a request-to-send mechanism (Page 5, [0078]). The examiner is interpreting Guo's "stop-for-a-round" to be analogous to the applicants "request-to-send."

Regarding claim 22, Guo teaches a wireless communication system comprising a wireless access point to estimate a number of active stations in said wireless communication system based on a number of stations from which transmissions are received during a pre-defined time period (Page 4, [0063], [0064]), and to transmit a signal indicating adaptation of a size of a contention window of a collision avoidance mechanism based on the estimated number of active stations of said wireless communication system and a wireless communication device to receive the signal and adapt a size of the contention window (Page 7, [0094]).

In regards to claim 23, Guo teaches the wireless communication system of claim 22, wherein the signal comprises a signal indicating modification of a parameter used in computing the contention window (Page 4, [0062]).

Regarding claim 24, Guo teaches the wireless communication system of claim 22, wherein the signal comprises a signal indicating modification of a threshold value of a request-to-send mechanism (Page 5, [0078]). The examiner is interpreting Guo's "stop-for-a-round" to be analogous to the applicants "request-to-send."

In regards to claim 25, Guo teaches a machine readable medium having stored thereon a set of instructions that, if executed by a machine, cause the machine to perform a method comprising estimating a number of active stations in a communication network based on a number of stations from which transmissions are received during a pre-defined time period and adapting a size of a contention window of a collision avoidance mechanism based on the estimated number of active stations of said communication network. (Page 4, [0063], [0064]; Page 7, [0094], [0102])

Regarding claim 26, Guo teaches the machine readable medium of claim 25, wherein the instructions result in dynamically modifying the size of said contention window (Page 4, [0064]).

In regards to claim 27, Guo teaches the machine readable medium of claim 25, wherein the instructions result in modifying a threshold value of a request-to-send mechanism (Page 5, [0078]). The examiner is interpreting Guo's "stop-for-a-round" to be analogous to the applicants "request-to-send."

Response to Arguments

3. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Emeott et al (US 2005/0043027) discloses a method and apparatus for facilitating data transmissions.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian A. Hannon whose telephone number is (571) 272-7385. The examiner can normally be reached on Mon. - Fri. 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christian A. Hannon
September 28, 2006

 9/29/06

QUOCHIEN B. VUONG
PRIMARY EXAMINER